

CONTENTS

	Page	
I	Introduction	1
I	I Test Methods	1
II	II Organized Detergency Investigation	3
III	III Statistical Presentation of Data	5
IV	IV Radioactive Tracer Technic	8
V	V Water Hardness	10
II	Screening Tests	12
I	I Acid Stability	13
II	II Alkali Stability and Solubility in Caustic Soda Solutions	19
III	III Stability toward Metallic Ions	22
IV	IV Surface and Interfacial Tension Values and Spreading Coefficient	27
V	V Lime Soap Dispersion	33
VI	VI Practical Wetting Tests	36
VII	VII Rewetting Tests	42
VIII	VIII Lather Values	44
IX	IX Solubility – Organic Solvents	49
III	Cotton Washing	53
I	I General	53
II	II Water Hardness	54
III	III Machines	56
IV	IV Standard Cotton Soil Fabric Preparation	65
V	V Commercially Available Soiled Test Fabrics	83
IV	Cotton Wash Test Methods	92
I	I Launder-Ometer Multiple Wash Technic	94
II	II Launder-Ometer Single Wash Technic	97
III	III Terg-O-Tometer Single Wash Method	98
IV	IV Deter-Meter Test Method	98
V	V Conventional Washer Method	99
VI	VI Practical Wash Tests	100
VII	VII Sea Water Detergency Tests	106
VIII	VIII Redeposition	108
V	Wool Washing	113
I	I Raw Wool Scouring	113
II	II In-Process Scouring	122
III	III Finished Fabric Scouring	126
IV	IV Commercially Available Soiled Wool Test Fabrics	127
VI	Washing Procedures for Other Fibers	130
I	I Commercially Available Soiled Fabrics	130
II	II Dry Cleaning	131
III	III Shampoos	136
VII	Hard Surface Cleaning	140
I	I General	140
II	II Metal Cleaning	141
III	III Painted Panels	151
IV	IV Linoleum Test Panels	156

V	Dishwashing	157
VIII	Radioisotopic Tracer Method	165
I	General	165
II	Selection of Radioisotope	173
III	Safety Precautions for Working with Radioactive C ¹⁴ Materials	176
IV	Adsorption Studies	179
V	In Cleaning Procedures	179
IX	Miscellaneous Tests	188
I	General	188
II	Brightening Agents	189
III	pH Determination	193
IV	Corrosion	196
	Index	207